

REMARKS/ARGUMENTS

Claims 1-49 were previously pending. As noted above, claims 2, 4-15 and 29-31 have been amended, claims 1, 3, 16-28 and 32-49 have been canceled, and claims 50-59 have been added. Support for these amendments may be found throughout the Specification.¹ Thus, claims 2, 4-15, 29-31 and 50-59 are now pending.

Applicants respectfully request reconsideration of this application based on the following remarks.

Claim Rejections – 35 USC § 103

Claims 1-11, 14-20, 22-27, 32-37 and 40-49 are rejected under 35 USC § 103(a) as being obvious over Karn et al., (Improving Round-Trip Time Estimates in Reliable Transport Protocols) in view of Neidhardt et al. (US Patent No. 5,943,480) and further in view of Perkins (IP Mobility Support).

Claims 12, 13, 21, 28-31, 38 and 39 are rejected under 35 USC § 103(a) as being obvious over Karn, Neidhardt and Perkins in further view of Aoki et al., (U.S. Patent No. 6,757,255).

This rejection is respectfully traversed.

As noted above, claims 1, 3, 16-28 and 32-49 have been canceled, and thus their rejection is moot.

Referring to independent claims 50-52, there is no combination of the cited references that discloses or suggests the recited method of optimizing a timing of re-registration of a mobile device with a wireless network or a mobile device with optimized re-registration timing, as recited.

In particular, there is no combination of the references that disclose or suggest a method of optimizing a timing of re-registration of a mobile device with a wireless network or mobile device with optimized re-registration timing having actions or modules for determining an unloaded network delay for round trip traversal of the link corresponding to the initial registration process, wherein the round trip traversal of the link occurs without concurrent in-band data, performing a re-registration process during a duration of the current registration, including initiating a current round trip estimation process during the re-registration process, wherein the current round trip traversal occurs with concurrent in-band data.

¹ See, e.g., Specification, paragraphs 0042-0045.

The cited references are silent with respect to this subject matter. Besides the deficiencies noted by the Examiner, Karn also fails to disclose or suggest the above-noted subject matter. Neidhardt discloses determining an estimate of a typical empty-system round-trip time, however, Neidhardt fails to disclose or suggest any other deficiencies of Karn or the above-noted subject matter. Perkins discloses registrations procedures, however, Perkins fails to disclose or suggest the above-noted subject matter. Additionally, Aoki fails to disclose or suggest any of the deficiencies of Karn, Neidhardt and Perkins with respect to the independent claims. Thus, there is no combination of the cited references that discloses or suggests the method or mobile device as recited by independent claims 50-52.

Additionally, for similar reasons, there is no combination of the references that disclose or suggest a method of optimizing a timing of re-registration of a mobile device with a wireless network or mobile device with optimized re-registration timing further having actions or modules for setting a retry timer equal to the sum of a predetermined backoff period and the current estimated network delay, if the retry timer expires before the end time of the current round trip estimation process, increasing the predetermined backoff period and repeating the transmitting of the re-registration request and the initiating of the current round trip estimation process, and resetting, at an end of the re-registration procedure, the current estimated delay equal to a difference between the end time of the current round trip estimation process and the start time of the current round trip estimation process.

Claims 2, 4-15, 29-31 and 53-59 depend from either independent claim 50 or independent claim 52, and thus are allowable for at least the same reasons. Further, each of these claims separately recite a combination of subject matter that is not disclosed or suggested by any combination of the cited references.

For example, referring to claims 5 and 55, there is no combination of the cited references that discloses or suggests a method or mobile device including a current round trip estimation process that further comprises at least one of an echo subprocess or a packet subprocess running concurrently with the re-registration process.

Therefore, based on the foregoing, the Examiner is respectfully requested to withdraw the rejections of the pending claims under 35 USC § 103 as being obvious over Karn in view of Neidhardt, and further in view of and Perkins, and further in further view of Aoki.

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CONCLUSION

In light of these remarks, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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